

# HIGH VOLTAGE (22KV) CLAMPMETER

Model KM 8000



Preliminary Data

High Voltage Clampmeter is connected with insulation rod, which can be used for measuring current at high voltage that is upto 22KV, on-line current measurement, also having peak measurement, data storage, and other functions, and its specially designed clamp makes it easier for clamping the testing wire by pressing or pulling back the insulation rod, time-saving and fast, widely used in transformer substation, power plant, industrial and mining enterprises as well as the inspection station and electrician maintenance departments for electrical current detection and field electrical operations. It can also replace the H. V. Transforming ratio tester, that is to detect the high & low current for primary circuit and secondary circuit separately. The insulation rod is light and convenient, with the advantages of anti-moisture, high temperature resistance, anti-impact, bending resistance, high insulation, flexibility and other characteristics.

## SPECIAL FEATURES :

- High Voltage AC Current Measurement.
- Low Voltage AC Current Measurement.
- Leakage Current Measurement.
- On-Line AC Current Supervision.

## GENERAL SPECIFICATIONS :

- \* **Display** : 4 digit backlight LCD display, Suitable for dark places also.
- \* **Resolution** : 0.1 mA
- \* **Jaw opening size** : 46 mm
- \* **Display LCD Size** : 47 x 28.5 mm
- \* **Autoranging** : 0.1mA ~ 1000A automatic
- \* **Sampling Rate** : 2 per second
- \* **Test Mode** : Clip-on CT, integral mode
- \* **Memory recall function.**
- \* **Measuring Scope** : 0.1mA ~ 1000A (50/60Hz automatic)
- \* **Transmission Method** : wireless Transmission, the maximum distance for direct transmission is about 30m.
- \* **Circuit Voltage** : Test for the circuit below 60KV (operated with insulation rod)
- \* **Data Memory** : 99 groups, during storage, the symbol "MEM" gives indication, "FULL" mark will flash to indicate the memory is full.
- \* **Peak Measurement** : The function of automatic capture and hold the maximum average value, under general test mode, press "HOLD" button longer till PEAK light is bright, that is start PEAK test function, also known as peak test.
- \* **Data Hold** : Under general test mode, press HOLD button to hold data, "HOLD" symbol display.
- \* **Overflow display** : Outrange display; displayed by "OLA" symbol.
- \* **No signal indicator** : When the receiver has not received transmit signal, it will display "no-" signal dynamically.
- \* **Auto Shut Down** : In about 15 minutes after booting, the meter will shut down automatically, in order to decrease the battery consumption.
- \* **Battery Voltage** : When battery Voltage reduced to 5V, battery low voltage symbol will appear to remind replacing battery.
- \* **Measuring Accuracy (23°C ± 5°C, 80% RH below)** :
  - 0.1mA ~ 299mA : ±(1%rdg + 3dgt)
  - 300mA ~ 10.00A : ±(1.5%rdg + 5dgt)
  - 50.0A ~ 199.9A : ±(2%rdg + 5dgt)
  - 200A ~ 600A : ±(3%rdg + 5dgt)
  - 601A ~ 1000A : ±(4%rdg + 5dgt)
- \* **Operating Temperature & Humidity** : -10°C ~ 40; 80% RH below
- \* **Storage Temperature & Humidity** : -10°C ~ 60; 70% RH below
- \* **Insulation Rod Dimensions** : 32mm, 1m/section (5 sections)
- \* **Insulation strength** : AC 40KV/rms (Between insulation rod and clamp core)
- \* **Structure** : Anti-Dripping Type II
- \* **Power Supply** : DC 6V alkaline battery (AAA\*4)
- \* **Dimension** : 76(W) x 255(H) x 31(T)mm
- \* **Weight** : About 335g (including battery), about 2.5kg (including insulation rod & battery).

## Insulation Rod



## ACCESSORIES :

Insulation Rod (1M/section) 5 sections, Carrying Case & User Manual.

## ELECTRICAL SPECIFICATIONS : KM 860A

### AC CURRENT (TRMS)

Range	Resolution	Accuracy	
		50-500Hz	500-1KHz
400A	0.1 A	±(3.5% rdg + 25 dgts)	±(3.5% rdg + 35 dgts)
3000A	0-1000	1 A	±(3.5% rdg + 30 dgts)
	1000-2000	1 A	±(5.5% rdg + 30 dgts)
	2000-3000	1 A	±(6.5% rdg + 50 dgts)


Overload Protection : 3000A DC or AC rms

### RESISTANCE

Range	Resolution	Accuracy
600	0.1	±(1.2%rdg + 10 dgts)
6 k	1	
60 k	10	
600 k	100	
6 M	1 k	
60 M	10 k	±(2.5%rdg + 15 dgts)

Overload Protection : 250V DC or AC rms

### DIODE & AUDIBLE CONTINUITY TEST

Range	Description	Test Condition
	Display read approx. Forward voltage of diode.	Forward DC current approx. 0.4mA Reverse DC Voltage approx. 2.8V
	Built-in buzzer sounds if resistance is less than 100	Open circuit voltage approx. 0.5V

Overload Protection : 250V DC or AC rms

### TEMPERATURE

Range	Resolution	Accuracy	
°C / °F	1°C / 1°F	-20~150°C -4 ~ 302°F	±(3°C + 2)
		150 ~ 300°C 302 ~ 572°F	±(3% rdg + 2 dgts)
		300 ~ 1000°C 572 ~ 1800°F	±(3.5%rdg + 10dgts)

NiCr-NiSi sensor. Sensor accuracy not included in above specified accuracy.

Overload Protection : 36V DC or AC rms

### DUTY CYCLE

Range	Accuracy	Frequency
0.1% ~ 99.9%	±(2.0% rdg + 2 dgts)	<10kHz

Sensitivity : sine wave 0.6Vrms

Overload Protection : 250V DC or AC rms

### DC CURRENT

Range	Resolution	Accuracy	
400A	0.1 A	±(3.0%rdg + 10 dgts)	
3000A	0-1000	1 A	±(3.5%rdg + 20 dgts)
	1000-2000	1 A	±(5.5%rdg + 20 dgts)
	2000-3000	1 A	±(6.5%rdg + 40 dgts)

Overload Protection : 3000A DC or AC rms

### CAPACITANCE

Range	Resolution	Accuracy
40 nF	10 pF	±(5.0%rdg + 10 dgts)
400 nF	100 pF	±(2.5%rdg + 5 dgts)
4 F	1 nF	
40 F	10 nF	±(5.0%rdg + 10 dgts)
400 F	100 nF	±(20.0%rdg + 20 dgts)
4000 F	1 F	

Overload Protection : 250V DC or AC rms

### FREQUENCY

Range	Resolution	Accuracy
10 Hz	0.01 Hz	±(0.5%rdg + 5dgts)
100 Hz	0.1 Hz	
1000 Hz	1 Hz	
10 kHz	10 Hz	
100 kHz	100 Hz	
1000 kHz	1 KHz	
10 MHz	10 KHz	

Sensitivity : Range of input Voltage : 1.5V ~ 10V, if input voltage over range, need adjust

Overload Protection : 250V DC or AC rms

All Specifications are subject to change without prior notice